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**Cranes — Requirements for  
mechanisms —**

**Part 5:  
Bridge and gantry cranes**

*Appareils de levage à charge suspendue — Prescriptions pour les  
mécanismes —*

*Partie 5: Ponts et portiques roulants*



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Published in Switzerland

## Foreword

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The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 10972-5 was prepared by Technical Committee ISO/TC 96, *Cranes*, Subcommittee SC 9, *Bridge and gantry cranes*.

ISO 10972 consists of the following parts, under the general title *Cranes — Requirements for mechanisms*:

- *Part 1: General*
- *Part 3: Tower cranes*
- *Part 4: Jib cranes*
- *Part 5: Bridge and gantry cranes*

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# Cranes — Requirements for mechanisms —

## Part 5:

## Bridge and gantry cranes

### 1 Scope

This part of ISO 10972 establishes the particular requirements relating to mechanisms for bridge and gantry cranes, as defined in ISO 4306-1. The general requirements for mechanisms for cranes are given in ISO 10972-1.

These particular requirements concern

- a) the general layout and design of mechanisms;
- b) the selection and/or design requirements of components;
- c) the instructions for manufacturing, mounting, installation and testing.

Rules for proof of competence calculations regarding different limit states (yield strength, fatigue, wear) are excluded from this part of ISO 10972.

### 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 4306-1, *Cranes — Vocabulary — Part 1: General*

ISO 10245-5, *Cranes — Limiting and indicating devices — Part 5: Overhead travelling and portal bridge cranes*

ISO 10972-1, *Cranes — Requirements for mechanisms — Part 1: General*

ISO 12210-1, *Cranes — Anchoring devices for in-service and out-of-service conditions — Part 1: General*

ISO 12488-1, *Cranes — Tolerances for wheels and travel and traversing tracks — Part 1: General*

IEC 60204-32, *Safety of machinery — Electrical equipment of machines — Part 32: Requirements for hoisting machines*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 4306-1 apply.